

NOTES ON THE BIRDS OF THE UPPER BURMA HILLS.

Shortly after Mr. Oates wrote his 'Birds of Burma' in 1883, Upper Burma or, as he called it, Independent Burma, was annexed and with it those parts of Burma which come so frequently under notice by name in the *Fauna*, the Chin and Kachin Hills and the Shan States (also hills); I quote Mr. Oates' description of Burma as it was in 1883 and enlarge on it to describe Burma as it now is.

'British Burma is an irregular narrow maritime country, hardly any portion being more than 200 miles from the sea; it lies entirely within the tropics. It is bounded on the east by Independent Burma and Siam; the general character of the country may be said to be mountainous, the only flat portions being strips of land along the banks of the larger rivers and considerable areas at the mouths of these rivers.' Mr. Oates divided his British or, as we now call it, Lower Burma into three divisions, Arakan, Central and Tennasserim, and proceeded to describe their features. The Western Division, Arakan, he describes as 'mountainous throughout', and mentions the range of mountains separating Arakan from Upper, or as it was then, Independent Burma and Central Burma as being of considerable altitude and unexplored ornithologically then. The Central Division he describes as traversed by two great rivers. 'The Irrawaddy River, which passes through British Territory for 300 miles, is a noble stream seldom less than one mile broad 'with a fertile Delta. The second river, to the east is the Sittang of less magnitude and the range of hills between these two rivers is said to reach an altitude at the highest point of 2,500 ft. Tennasserim, he describes as 'consisting of a mass of mountainous ranges'—its northern portion traversed by the Salween River, 'one of great size but useless for purposes of navigation by reason of its numerous rapids'. Two of the highest peaks in Tennasserim are named Moolevit and Nwalabo about 7,000 ft. altitude. description almost applies to his Independent Burma, or as we now know it, Upper Burma, the Arakan range of hills continue north as the Chin Hills and the Tennasserim ranges continue north through Karenni, as the Karen country is called, and the Shan Hills both joining up into the Kachin Hills, which cover the whole north part of Upper Burma. Thus arises the formation of the hill divisions of Upper Burma, summarized by Government as 'backward tracts', occupied by the Chin, Kachin and Shan; racial names which comprise many tribes speaking different languages and having totally different customs and habits. These areas, I should add, are large; the Shan hills alone cover an area of 40,000 square miles. My map is intended to emphasize the position of these three hill divisions, as it is on the birds inhabiting them only that these notes are written. Some Assamese species of birds find their way down south via the Chin hills, Arakan hills, and across to Tennasserim, or if they go west through the Kachin hills, they keep west into Yunnan. The Shan hills, except perhaps in the extreme north. seem to pick up birds spreading west from China which at any rate are generally of a different subspecific rank to the Assamese birds. How far this is due to the area of plain country lying in Central Burma between the Shan and Chin Hills being a 'dry zone' one cannot say, but the dry zone with its annual rainfall of barely

20 inches (it contains a solitary volcanic formed hill about 3,000 ft. high called Mt. Popa) cannot be very attractive to the birds of the Eastern and Western hills accustomed to jungle and a good rainfall. If the lower hills mentioned by Mr. Oates as forming a range separating the Irrawaddy and Sittang river valleys, continued north through the dry zone, we might have had a totally different distribution of Burma birds, and Mr. Stuart Baker perhaps spared the description of many subspecies. On the west of Upper Burma flows that large tributary of the Irrawaddy River, the River Chindwin which is the eastern border of the North Chin Hills. The upper waters of this river is in unexplored country and contains the mountain 'Sarramatti' over 12,000 ft. in altitude. Ornithologically a great deal remains to be done in these hills as the distribution of subspecies seems to me to be confused. Unfortunately any keenness on the subject seems to be confined to Europeans and their work nowadays is more exacting but many will still, I hope, look to birds to furnish them with enjoyable and interesting relaxation and in time subspecific geographical boundaries, if possible, will become definite; to such these notes may be of assistance as I have endeavoured to provide a list of birds available in these delightful hills.

Personally I have tried 'to learn about birds without a gun' and regret having been of so little use in the scientific study of them, but they have given me endless enjoyment.

I.—Family CorvidÆ

Burma, even in these northern hills, is only represented by two species of crow. One might have expected a raven or a carrion crow in the very north of the Kachin Hills which border on Tibet, but so far these birds have not been recorded therein.

1. The Jungle Crow. Corvus coronoides andamanensis.

'Andamanensis' is our subspecies in all these hills and throughout Burma I have never shot it nor measured it and never looked to see if it had white bases to its feathers or not. My idea of the bird is that it is ubiquitous but perhaps less communistic than the House Crow, and every jungle village knows them—neither shy nor retiring—and if one camps in any out of the way spot or even halts for a rest and snack a jungle crow must needs inspect you. As a poacher of eggs and young of other birds he has no equal.

In the Shan Hills they roost together in selected trees or bamboo patches in some numbers, and can be seen homing as *Corvus stlendens* does in the evenings, although never in such large numbers; in fact they have much the same habits as the House Crow. In the Burmese hills the first fortnight in March will be found the best time for eggs, which vary even in the clutch in colour shape and size.

2. The House Crow. Corvus splendens insolens.

Is the Burmese hill subspecies but confines itself more to the large towns at low elevations, in fact has not much use for jungle villages and the higher elevations.

3. The Magpie. Pica pica serica.

As might be expected, the Chinese subspecies inhabits the Eastern hills of Burma. The species has not been recorded in the north west, i.e., the Chin Hills.

In the Shan Hills this bird comes almost as far West as it can without leaving the hills, and as Mr.Oates does not record it in his *Birds of British Burma* the southern boundary presumably is the Karen country. Resident and a very

confiding bird, seeming to like the proximity of man—noisy, continually chattering in the breeding season; the young apparently keep with their parents

till the next breeding season comes round.

Early March for eggs, but like rooks in England it visits the old nest long before it commences to lay. Harington found koel's eggs in the nest of this magpie on more than one occasion, but it was in the Shan and Kachin Hills as recorded in vol. xix, B.N.H.S. Journal, page 108, and not in the Chin Hills as recorded in the Fauna.

4. Red-billed Blue Magpie. Urocissa melanocephala magnirostris.

The Burmese Red-Billed Blue Magpie is a familiar bird and occupies, according to my observations, both plains and hills alike all over Burma, but the subspecies melanocephala may take its place in the eastern part of the Shan Hills. I saw a solitary individual of this species capture and carry off in its bill a large lizard—The lizard was on a tree trunk and tried to dodge the magpie by running round it, but the quarry was well hunted and after repeated digs or pecks fell to the ground when it was seized by the scruff of the neck and carried off—I expect this magpie to be about as big a poacher as the Jungle Crow.

Eggs in my collection taken near Rangoon, Chin Hills and Shan Hills, vary as to size, shape and colour. Old birds get very excited and noisy when their nest is approached by man and 'give it away.' April appears to be the

nesting month.

5. The Yellow-billed Blue Magpie. Urocissa flavirostris flavirostris.

So far this species is only recorded from the Chin Hills at about 7,000 ft. on the higher part of the main range north of Falam. I discovered the bird nesting at the end of April and shot one of the parent birds. It was kindly identified by Mr. Stuart Baker and, as now recorded in the Fauna, he stated it differed somewhat from the Indian bird. Sites of nests were lower down on the tree than those of the red-billed blue magpie generally are and the two clutches vary somewhat in colouration, one clutch being rather coarsely and the other very finely spotted, and also vary in size.

6. The Green Magpie. Cissa chinensis chinensis.

This bird is found in all these Burma hills, but one would say is rather sparingly distributed. They are shy birds and hence not often come across and difficult to study. April seems the breeding month and numerous nests were taken by Mackenzie in the N. Chin Hills. The bird defeated me in the Shan Hills, but Harington records a seven-egg clutch in the Kachin Hills.

7. The Tree-pie. Dendrocitta rufa sclateri and kinneari.

A species inhabiting all these Northern Burmese Hills, but the Chin and Kachin birds are separated subspecifically as above. This Tree-pie seems to be more of a plains bird than the next and does not usually extend higher up than the foot hills.

Mackenzie records the taking of a nest of this species at Maymyo in the Shan Hills about 3,500 ft. elevation in April, but otherwise my records show eggs taken in the plains only and although I often found nests of *Dendrocitta* round Maymyo I always attributed them, I daresay wrongly, to *D. sinensis*.

8. The Burmese Hill Tree-pie. Dendrocitta sinensis assimilis.

Distribution as for rula above. This bird does not vary subspecifically in Burma, and Chin and Shan birds are similar. In the Fauna the western limit is given as the Pegu and Arakan Yomahs (Hills). The Pegu Yomahs lie in the centre of Burma and this is therefore, I think, somewhat misleading. A garden visitor with a familiar call, nesting often quite low down on tree stumps and bushes within easy reach, but always well away from houses, usually during the last fortnight in April.

9. The Hooded Racket-tailed Magpie. Crypsirhina cucullata.

Personally I have never seen this small Magpie in either the Shan or Chin Hills, but a nest was taken by Sir S. Robinson near Maymyo in the Shan Hills, the eggs being identified by Mr. Stuart Baker. In the Fauna the distribution is a little confused. Monywa on the Chindwin River might be taken as its

northern extremity, the foot of Mt. Victoria as its western and Pynmana (not on the Chindwin River) as its southern; practically the 'Dry Zone' of Burma as described under 'habits'. Harington did not record it round Bhamo, Kachin Hills.

10. The Burmese Jay. Garrulus leucotis leucotis.

The bird is found in the Eastern hills—recorded in the Kachin Hills, China side, by Harington and again by him in the Shan Hills, in the Journal of the Society. It seems to be very like its English cousin in habits. Harington's record of this bird's nesting in a community must be unique, for although I have often found the nest I have never come across a similar 'jayery'. For his description see Journ. Bomb. Nat. Hist. Soc., vol. xx, p. 1003. Breeding month is April. The most favoured site for the nest is, I think, undoubtedly the end of a big leafy branch of an oak tree generally high enough to necessitate a climb or a 'leg up'.

11. Sharpe's Jay. Garrulus leucotis oatesi.

In the Northern Chin Hills, Mackenzie records the above subspecies, but in the Southern Chin Hills, Mt. Victoria, skins sent home by me were identified as the next species.

The distribution of *oatesi*, as noted in the *Fauna*, is not very happy, as the Chindwin River is like the Irrawaddy River—east of the Chin and Lushai Hills—The Irrawaddy River is a long way to the east but it may be this bird's eastern boundary in the Kachin Hills.

It may be as well also to note that the description of the colouration of the head in the new edition of the Fauna appears quite different to the colouration given in the Appendix to vol. iv, of the old edition. In the latter, more over, its distribution includes North-Eastern Burma, but it is evident that by this only the Shan Hills is meant. The bird at Maymyo, Shan Hills, has been identified as leucotis and it seems to me fairly certain that the subspecies vatesi is one inhabiting the N.-W. Burmese Hills only.

12. Rippon's Jay. Garrulus bispecularis haringtoni.

The new edition of the Fauna gives the distribution of this bird as South Chin and Kachin Hills. I think the inclusion of the latter country must be wrong unless G. leucotis leucotis and G. leucotis oatesi, and G. b. haringtoni all meet there.

The British Museum identified birds I sent home from Mt. Victoria as G. bispecularis and Rippon has evidently sent other skins home.

Both leucotis and bispecularis seem to have exactly the same habits.

The subspecies *rulescens* may come through the north of the Kachin Hills from south of the Brahmapootra River to Yunnan.

II .- Family PARIDÆ

13. The Indian Grey Tit. Parus major cinereus.

This bird must be included in this list as it has been recorded near Bhamo Kachin Hills (Harington) and North Chin Hills (Mackenzie).

14. The Burmese Grey Tit. Parus major commixtus.

The commonest representative in the Eastern Hills of Burma, as far north as Bhamo. It was this subspecies that obliged me by nesting in boxes in my garden in Maymyo (Shan Hills), not *P. m. cinereus* as recorded in the *Fauna*. This tit nests about the middle of March generally very low down, often in the ground on a bank, under a stone perhaps or even in an old white ants' nest hole, but a pair nested in the eaves of my two storeyed house. They sit tight when once incubation is started.

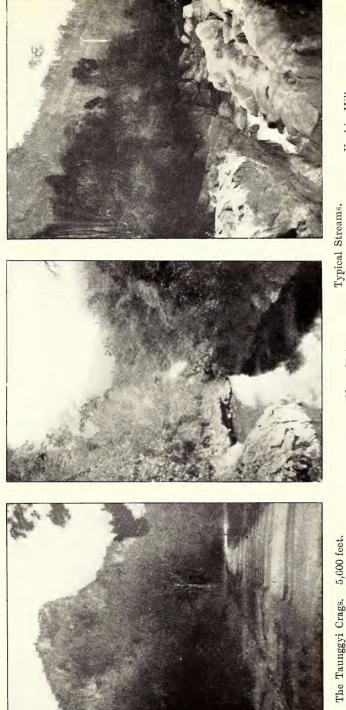
15. The Green-backed Tit. Parus monticolus monticolus.

This subspecies inhabits the Western Burmese hills probably down to Mt. Victoria and Arakan hill tracts.

16. The Yunnan Marsh-Tit. Parus palustris pœcilopsis.

To correct the Fauna, Maymyo is in the Shan Hills, not Kachin Hills, but I cannot find the record and Maymyo should perhaps be read as Bhamo.

NOTES ON THE BIRDS OF THE UPPER BURMA HILLS.



The Taunggyi Crags. 5,600 feet. Southern Shan States.

Shan States.

Kachin Hills.



17. The Yunnan Brown-crested Tit. Lophophanes dichrous wellsi.

North Shan Hills.

I regret I have never noticed either the Marsh or Cole Tits in any of the Burma hills. They are evidently rare.

18. The Chinese Yellow-browed Tit. Sylviparus modestus saturatior.

Recorded from Mt. Victoria, Chin Hills, but it is also stated to be found in N. Burma and east into China—a record of a Chinese bird finding its way across to the western hills of Burma, but probably this bird has been overlooked.

19. The Burmese Black-spotted Yellow Tit. Machlolophus spilonotus subviridis.

I saw this bird in the Kentung State Shan Hills, which is the furthest eastern part of the Shan Hills. In April it was building, but some travellers passing disturbed it while I was watching, and the nesting material it was carrying was dropped, and the bird flew off.

Kachin Hills (Harington), N. Chin Hills (Mackenzie). Mr. Oates in his Birds of Burma says, this subspecies is, according to Mr. Hume, only the young of M. s. spilonotus, but this is perhaps ancient history.

20. Hume's Red-headed Tit. Ægithaliscus concinnus manipurensis.

Each of our hills has its own subspecies of this bird. Mackenzie records it in the Chin Hills. (vol. xxv, p. 75).

21. The Shan Red-headed Tit. Ægithaliscus concinnus pulchellus.

South-eastern Hills.

2?. Rippon's Red-headed Tit. Ægithaliscus concinnus talifuensis.

North-eastern Hills. Harington's description of the nesting of the latter bird is in (vol. xix, page 110) of the *Journal*. Kachin Hills not Shan Hills as recorded in the *Fauna*, to be exact.

The Chinese Black-headed Tit. Ægithaliscus bonvaloti bonvaloti.

Occurs in North-east Burma and the other subspecies sharpei the Mt. Victoria Black-headed Tit, in the higher mountains of the Chin Hills.

24. The Indian Sultan Tit. Melanochlora sultanea sultanea.

Occupies all our three hill divisions, I know the bird well in the Shan States, but cannot say I ever saw it in the Chin Hills. It has an unmistakable call as it forages in the high tree tops. I only once found the nest and that was destroyed before I calculated the time for robbing it had arrived. The nest was in a tree hole almost within reach of the hand, the tree being on the edge of a perennial stream (Elevation 3,000 ft.) and there was a dense lining of cotton down. I think the bird likes to be near water—April.

III.—Family Paradoxornithidae

25. Austen's Parrot-Bill. Paradoxornis guttaticollis.

Kachin Hills (Harington), N. Chin Hills (Mackenzie).

26. Salvadori's Suthora. Suthora poliotis feæ.

This bird is apparently only known to occur at Fort Stedman, in the Shan Hills. Fort Stedman was a military Post and stands on the shores of Lake Inle just below Taunggyi. Elevation about 3,000 ft.

27. Rippon's Suthora. Suthora poliotis ripponi.

This subspecies occurs in the Chin and Kachin Hills.

28. Bingham's Suthora. Suthora gularis craddocki.

Recorded from the far east of the Shan Hills at high elevations.

29. Anderson's Suthora. Suthora webbiana brunnea.

Kachin Hills only (Harington).

- 30. The Black-browed Suthora. Suthora ruficeps atrosuperciliaris. Kachin Hills (Col. Rippon).
- 31. Thompson's Suthora. Neosuthora davidiana thompsoni. Southern Shan Hills.
- 32. Baker's Parrot-Bill. Psittiparus ruficeps bakeri.

The new edition of the Fauna gives all these hills as the habitat of these subspecies.

33. Hartert's Parrot-Bill. Psittiparus gularis transfluvialis.

Distribution as for the species ruficeps. I must confess I am myself very ignorant of this family of interesting birds. I have seen them very occasionally when I had not a gun and I once found a nest, without eggs, but could not visit it again. They seem rare and very local.

IV .- Family SITTIDÆ

34. The Chin Hills Nuthatch. Sitta victoriæ.

One of the numerous finds of Col. Rippon.

35. The Burmese Nuthatch. Sitta castaneiventris neglecta.

To be found in the Eastern Hills of Burma. The call is a familiar one and unmistakable. I found the species common to the Shan Hills. It is stated in the Fauna, quite correctly I think, to be an early breeder, but I was fortunate to get a clutch of fresh eggs on April 26th. 33 ft. up in a cotton tree. In taking the nest the climber had to come down before actually getting to the eggs and the two parent birds returned and began to pull out the cotton wool which had been stuffed into the hole to protect the eggs. The usual plastering had been done which had set very hard and the nest, if it can be called one, consisted of leaves with some thin flat tree seeds.

36. Austen's Nuthatch. Sitta europæa nagænsis.

Distribution Chin and Kachin Hills only.

37. The Giant Nuthatch. Sitta magna.

Shan States. Not recorded from the Chin Hills and Kachin Hills. I saw this bird on more than one occasion near Taunggyi, Shan States. Even in the compound of my bungalow, when I could watch it through glasses, it behaved more like an ordinary bird than a nuthatch and did not climb about the tree trunks. It seemed to be feeding on insects which were on the limbs of the trees and was active in its movements, and did not take long to examine the few trees in my compound. It made no call. Nidification is not recorded. I had hoped to find it in the rocky crags of Taunggyi Hill and searched for some signs, but I had no luck.

38. The Beautiful Nuthatch. Sitta formosa.

Shan States.

39. The Velvet-fronted Nuthatch. Sitta frontalis frontalis.

Apparently to be found in all these three parts of Burma. I have seen it in the Shan States at nearly 4,000 ft. I once saw a party of four or five, presumably a family party, but they did not give me much time to watch them.

V .- Family TIMALIDÆ

40. The Ruious-necked Laughing-Thrush. Dryonastes ruficollis.

North Chin Foot-hills (Mackenzie) and round Bhamo, Kachin Hills (Harington). It has not been recorded from the Shan Hills.

41. The Black-throated Laughing-Thrush. Dryonastes chinensis leucogenys.

Only recorded so far in the Shan States. This is a fine bird going about in parties and behaving like *D. sannio* and as noisy and garrulous as the rest of the tribe. I have shot it in many places in the Shan States to try and find its breeding places but never succeeded.

I am quite sure it migrates, locally only perhaps, but in two different years I have noticed its arrival at a place near Taunggyi at the end of March or beginning of April, the birds being numerous and singing where there was not one to be seen before, and then after a few days the birds would disappear again towards the east. I thought and my idea is they breed, if in Burma at all, near China (Yunnan) and Siam. Hopwood, however records (Vol. xxvi, page 855) of the *Journal* the finding of one nest of this bird on Nwalabo mountain in Tennasserim. Eggs, skim-milk blue in colour 1·23" × 88". Harington's record, which he himself describes as doubtful, were white eggs and measured 1·04 × ·79, in fact the same size as *D. sannio*.

Two eggs said to be of this species sent me by a friend from a place over 100 miles East of Taunggyi were very light blue and measure the same as

Hopwood's, but I doubt the authenticity.

42. The Kachin Hills Laughing-Thrush. Dryonastes cærulatus kaurensis.

Only the Kachin Hills (Harington and Grant). Grant obtained eggs early in June.

43. The White-browed Laughing-Thrush. Dryonastes sannio.

Very common in both the Kachin and Shan Hills, Mr. Stuart Baker in the Fauna says it occurs in the Chin Hills. I never came across it nor does Mackenzie record it; however I only mention this as proof against it being common in these hills, as stated in the Fauna under habits.

The description given by Mr. Stuart Baker in the Fauna is all that one can

want.

In my experience the commonest nesting site in the Shan States is low down in brambles or other bushes. The eggs are generally white, but Cook curiously states that all his eggs, taken in April, were of the light blue type which he took at Kalaw, a place some 40 miles to the west of Taunggyi and near the valley.

44. Austen's Laughing-Thrush. Dryonastes galbanus.

This species of *Dryonastes* appears to occur only in the Chin Hills. Late April and May according to Mackenzie is the nesting season.

45. The Himalayan White-crested Laughing-thrush. Garrulax leucolophus leucolophus. Records show that the subspecies occupies the west of Burma, which means the Chin and Kachin Hills.

46. The Burmese White-crested Laughing-Thrush. Garrulax leucolophus belangeri.

This race inhabits the East of Burma, i. e. east Kachin and Shan Hills. More noisy than *Dryonastes*, which is saying a good deal. When taking a nest in the North Shan States, at about 3,50 ft., which by the way had an egg of *H. sparverioides* in it, I was almost mobbed by a whole party of them, friends no doubt of the owners of the nest. Other birds also called up to witness the robbing were *G. pectoralis* and *O. emeria*, all giving vent to their feelings of sympathy. May seems the best month for eggs in the Hills.

47. The Burmese Black-gorgeted Laughing-Thrush. Garrulax pectoralis.

48. The Indian Necklaced Laughing-Thrush. Garrulax moniliger.

Both these very similar birds inhabit all these three Hill countries and

seemingly are found in the same jungle.

The 'Buff-ended' subspecies do not occur in these hills. I have a clutch of 4 G. pectoralis with 5 of C. coromandus eggs taken on the 1st of May. I have also noted the finding of a nest nearly on the ground in grass, a rare position, and shot the bird off it.

49. The Ashy Laughing-Thrush. Ianthocincla cineracea cineracea.

The Chin Hills only.

50. Styan's Laughing-Thrush. Ianthocincla cineracea styani.

Occurs in the East Shan States, but I have no record of it. A chance for some one to collect it in the Kengtung State! I obtained the nest and eggs *I.c. cineracea* in the South and North Chin Hills, Mackenzie, still further north, took

many nests and gives an interesting description of the nest, etc. (Journ. Bom. Nat. Hist. Soc., vol. xxv, p. 77). He does not however give the number of eggs he found. As a rule, I have noted 2 only in the few nests I have taken myself.

- 51. Hartert's Laughing-Thrush, lanthocincla rufogularis assamensis. Chin Hills.
- 52. The Chin Hills Laughing-Thrush. Ianthocincla austeni victoriæ. Only recorded apparently from the South Chin Hills.
- 53. Hume's Red-headed Laughing-Thrush. Trochalopterum erythrocephalum erythrolæma. Chin Hills only. Mackenzie has given a good account of this bird's nesting. (Journ. Bomb. Nat. Hist. Soc., vol. xxv, p. 78.)
 - 54. Wood's Red-headed Laughing-Thrush. Trochalopterum erythrocephalum woodi.
- 55. Blyth's Red-headed Laughing-Thrush. Trochalopterum erythrocephalum melanos-

The above two subspecies occur in the Shan States.

56. The Sikhim Red-headed Laughing-thrush. Trochalopterum eythrocephalum nigrimentum.

Recorded from the Kachin Hills.

57. The Burmese Crimson-winged Laughing-Thrush. Trochalopterum phæniceum ripponi.

Kachin Hills and Shan States. I can record it right away to the most eastern limits (Kengtung State). A bird shot by me on the 30th March at an elevation of 4,000 ft. showed no signs of breeding, but about a fortnight later I saw many pairs going about together and they were calling a great deal. They certainly occurred only in the higher parts and seemed to prefer old clearings in heavy jungle.

- 58. The Assam Crimson-winged Laughing-Thrush. Trochalopterum phæniceum bakeri. Recorded by Mackenzie from the North Chin Hills where he took the nests.
- 59. The Burmese Red-tailed Laughing-Thrush. Trochalopterum milnei sharpei.

Kachin Hills and North Shan Hills. Harington records it in the former and I have myself shot the bird in the N. Shan States (Taungpeng Hills) at about 5,000 ft. one of a party of ten or a dozen which came out of the jungle on to the road. This party was feeding in the densely covered nullahs which occur among the Shan Tea gardens. Harington took the nest in the Kachin Hills.

60. The Blue-winged Laughing-Thrush. Trochalopterum squamatum.

According to the Fauna, found in all these hills, but Harington's record in the Kachin Hills seems to show that it is a rare bird.

- 61. The Manipur Streaked Laughing-Thrush. Trochalopterum virgatum.
- A Brahamaputra bird, coming down to the Chin Hills only. Mackenzie records it. He obtained a nest with incubated eggs, May.
 - 62. Austen's Striated Laughing-Thrush. Grammatoptila striata austeni.

Mackenzie's record of this bird in the North Chin Hills is new. He took a nest with eggs (fresh) on 29th April.

- 63. The Spotted-breasted Laughing-Thrush. Stactocichla merulina merulina. Remarks above apply. Only the nest of this bird was taken the 27th April.
- 64. The Chinese Babax. Babax lanceolatus lanceolatus. Kachin Hills and North Shan States.

65. The Mt. Victoria Babax. Babax lanceolatus victoriæ.

Occurs in the South Chin Hills. The nest of one which I took just below Mt. Victoria was high up in a tree and not a bit difficult to find. The skin, if I remember correctly, of the parent bird is in the Society's Museum where it was kindly identified—2 blue eggs, April. Venning's eggs must have come, I think, from 50 or 60 miles further north,

66. The Striated Babbler. Argya earlii.

Recorded in the Fauna as occurring in the Chin Hills—the only place I ever saw it in Burma and took its nest was in the plains near Rangoon. Probably only to be found in the valleys bordering on the Hills as recorded by Harrington at Bhamo. The whole of Burma is very poorly represented by the genera Turdoides and Argya although the latter is represented by A. gularis, a Burmese bird of the Dry Zone.

67. Grant's Slaty-headed Scimitar-Babbler. Pomatorhinus schisticeps mearsi.

Recorded from the Chin Hills only, differs in no way from its confreres. The nests I found on the Mt. Victoria range were on the hill-side, on the ground just above the edge of the road-cutting at low elevations. The bird slips off and down the 'Khud' pretty quickly. Generally 3 eggs; middle of April and perhaps earlier.

68. Tweeddale's Scimitar-Babbler. Pomatorhinus schisticeps nuchalis.

Appears to be confined to South Burma and the South Shan States only in the area dealt with in these notes; Prome mentioned in the Fauna is in the West of Burma and Harington in his notes on the Timeliae and their allies records a specimen obtained from Mt. Popa in the dry zone.

69. Harrington's Shan Scimitar-Babbler. Pomatorhinus olivaceus ripponi.

The east of Burma; a very common bird throughout the Shan States.

'What! What! (pause) What! What!' expresses, when quickly said, the common call of the bird. A bird of scrub jungle, and open cultivated spaces, seen round villages: likes the top of a stump of a tree or even a pine-apple bush as a nesting site, but often builds in the grass edges of banks of streams and sometimes even on the ground in Jungle. Middle of April seems the best time. Eggs 2 or 3, generally the latter; the young are clothed in black down.

70. Phayre's Coral-billed Scimitar-Babbler. Pomatorhinus ferruginosus phayrei.

Mackenzie records this from the North Chin Hills.

71. Baker's Rufous-necked Scimitar-Babbler. Pomatorhinus ruficollis bakeri.

North Chin Hills and through the Kachin Hills into Yunnan. Recorded by Mackenzie in the former locality and Harington in the latter.

72. McClelland's Scimitar-Babbler. Pomatorhinus erythrogenys macclellandi.

Chin Hills—very common. The nest I took of the bird in the Chin Hills was on the ground and at the bottom of a small hollow—a domed nest as usual. April is the month.

73. David's Scimitar-Babbler. Pomatorhinus erythrogenys gravivox.

Apparently a Kachin Hills subspecies.

74. Salvadori's Scimitar-Babbler. Pomatorhinus erythrogenys imberbis.

Shan States only apparently.

Cook describes its nest in his articles on the Birds of Kalaw (Journ. Bomb. Nat. Hist. Soc., vol. xxii, p. 200). I only found young in the nest at Taunggyi, 23rd April. The nest was curiously placed, as Cook describes his find, in a place where it could have easily been trodden on by cattle. The nest was on the ground and rather difficult to see, but the parent birds were both very agitated and showed no fear.

75. The Arakan Scimitar-Babbler. Pomatorhinus hypoleucus hypoleucus. Chin Hills ouly.

76. The Burmese Red-capped Babbler. Timalia pileata jerdoni.

Evidently to be found in all three areas, but it is a wonder that the Bengal subspecies (bengalensis) does not come down to the Chin Hills. I have found it in suitable places in the Shan Hills up to 5,000 ft. A common bird nesting on the ground; mostly a domed nest.

77. The White-headed Shrike-Babbler. Gampsorhynchus rufulus rufulus.

I only came across this bird in the Arrakan Hills and I do not know how far north it extends, but the *Fauna* records its occurrence in the Chin Hills—Harington away north in the Kachin Hills.

78. The Indian Yellow-eyed Babbler. Pyctorhis sinensis sinensis.

Ubiquitous—a bird to be congratulated, considering the extent of its distribution and its numbers, in not having evolved any subspecies in Burma. I should like to call attention to its song, because on first hearing it I had a fine hunt and eventually secured what I had hoped would be something new.

79. The Malay Spotted-Babbler. Pellorneum ruficeps subochraceum.

Harington, Mackenzie and Cook give the subspecies as minus Sharpe's Spotted Babbler, for Kachin Hills, Chin Hills, and Shan Hills, but birds from Maymyo in Shan Hills have been identified as subochraceum. I have shot some myself and a skin was identified for me in England as 'minus' as far as East as the Salween River in the Shan Hills. Harington in his notes on the Timeliides locates this subspecies (sub-ochraceum) in the South, even South of the Shan Hills and as he had access in writing these notes to skins from Maymyo, it is probable that birds from there were wrongly identified and these subspecies excluded from my areas. Mr. Stuart Baker in the Fauna also notes he is puzzled about the distribution of these two subspecies.

80. Rippon's Babbler. Pellorneum ignotum cinnamomeum.

Seems universally distributed in the hills of Upper Burma.

81. Tickell's Babbler. Pellorneum tickelli tickelli.

Mackenzie records it in the Chin Hills. A species which apparently comes down to Assam *via* the western area of Burma and down the Burmese peninsula of Tennasserim, avoiding the Shan Hills, a part of Burma where the species is not represented.

82. Venning's Wren Babbler. Turdinulus brevicaudatus venningi.

Southern Shan Hills.

83. Baker's Wren Babbler. Turdinulus epilepidotus bakeri.

Southern Shan Hills.

84. Abbott's Babbler. Malacocincla sepiaria abbotti.

Probably occurs in the lower Hills of all these three areas but I had only a personal acquaintance with it in the plains near Rangoon.

85. The Assam Black-throated Babbler. Strachyris nigriceps coltarti.

86. The Malay Grey-throated Babbler. Strachyris nigriceps davisoni.

The former subspecies seems to inhabit all the three areas being dealt with; but in the S. Shan Hills birds are stated to be intermediate.

87. The Nepal Golden-headed Babbler. Strachyris chrysæa chrysæa.

Kachin Hills. (Harington) North Chin Hills.

88. The Chin Hills Golden-headed Babbler. Strachyris chrysæa binghami. Chin Hills.

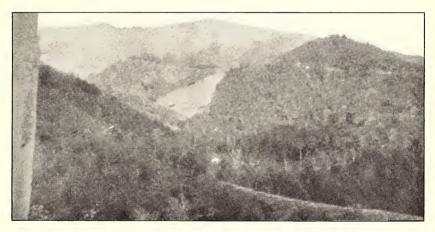
89. The Burmese Golden-headed Babbler. Strachyris chrysæa assimilis. South Shan Hills.

90. The Bhamo Red-headed Babbler. Stachydridopsis ruficeps bhamoensis. Kachin Hills and South Shan States.

NOTES ON THE BIRDS OF THE UPPER BURMA HILLS.



Mid-East Shan Hills. Valley 3,000 feet.



Typical country Northern Shan States. Elevation over 6,000 feet. Chin Hills are similar.



Typical country Southern Shan States.

Mongyai valley 3,000 feet. Hills round rising up to 8,000 feet.



91. The Yellow-breasted Babbler. Mixornis rubricapilla rubricapilla.

Chin, Kachin and Shan Hills. The bird is said to be more of a plains bird, but I have taken a nest in the Hills at about 3,000 feet, probably its limit. Apparently a bird with very variable plumage.

- 92. The Nepal Babbler. Alcippe nepalensis nepalensis. Chin Hills.
- 93. The Shan Hills Babbler. Alcippe nepalensis fratercula. Kachin and Shan Hills.
- 94. The Arakan Quaker-Babbler. Alcippe poioicephala phayrei. Recorded by Mackenzie in the Chin Hills,
- 95. The Upper Burma Quaker-Babbler. Alcippe poioicephala haringtoniæ.

Harington records this subspecies, in the plains of the Kachin Country and North Shan Hills.

- 96. The Lower Burma Quaker-Babbler. Alcippe poloicephala magnirostris. Recorded from the South Shan Hills.
- 97. The Assam Tit-Babbler. Scheeniparus dubius mandelli. Chin Hills.
- 98. Rippon's Tit-Babbler. Schæniparus dubius genestieri. Kachin and Shan Hills.
- 99. The Chestnut-headed Babbler. Pseudominia castaneiceps castaneiceps. Chin, Kachin and Shan Hills.
- 100. Godwin Austen's Fulvetta. Fulvetta vinipecta austeni.

Eggs taken by me at the end of April in the N. Chin Hills I attributed to this subspecies, but it may have belonged to the next *ripponi* from Mt. Victoria. This little bird is common in high evergreen forests of the Chin Hills.

- 101. Rippon's Fulvetta. Fulvetta ruficapilla sordidior. Eastern Shan Hills.
- 102. The Long-tailed Sibia. Sibia picaoides picaoides.

According to the Fauna to be found in all the three areas, but it has curiously not been recorded by either Harington or Mackenzie in their notes on the birds of the Kachin and Chin Hills, nor have I come across it in the Shan Hills.

- 103. The Grey Sibia. Leioptila gracilis.
- Col. Rippon recorded the bird from the Kachin Hills and it is the common species of Sibia in the Chin Hills. I took two nests on the 28th and 29th April. They were built about 12 ft. from the ground in the top fork of saplings. The eggs varied much in size, and in depth of blue of the ground colour.
 - 104. Tickell's Sibia. Leioptila melanoleuca melanoleuca.
 - 105. Radcliffe's Sibia. Leioptila melanoleuca radcliffei.

The common Sibias of the Shan Hills are the two above subspecies, if they are separate subspecies! I have taken two nests of radcliffei; the eggs vary; in one case they were like my gracilis eggs in colouration, in the other a light blue ground very sparingly spotted. I should call them blackbird and thrush types, but the spots are dark red. One nest, 24th March, was built more against than on a branch of a pine tree just out of ordinary reach. Pine needles, and grass and a few leaves had been used with pine-needle lining, and it was coated outside with wool giving the whole a greyish appearance; a bit of string and a bit of paper also decorated the outside. The structure measured 65 mm. inside and 110 mm. in diameter outside. This nest was in the hedge of a house compound, the other (28th March) being in a roadside tree. I discovered they were early breeders (end of March) by picking up a fully-fledged

young bird at the end of April the year before. The skins I sent home have been identified as radcliffei. The call is like the description given of the species castanoptera (p. 306, vol. v of the 2nd Edition of the Fauna) rather mournful but not unmelodious and frequently uttered during the breeding season. It is particularly common round Taunggyi where I took one of the above-mentioned nests. It is a very quick rat-like mover amongst branches when feeding. I notice the eggs of the subspecies melanoleuca taken in Tennasserim were unspotted and the bird has a different note by Davison's description.

106. Fea's Sibia. Leioptila castanoptera.

Shan Hills. Cook identified a Sibia shot at Kalaw about 45 miles due west of Taunggyi as this.

107. Blyth's Sibia. Leioptila annectens annectens.

Recorded by Harington from Bhamo—Kachin Hills also according to the Fauna found in the Kachin Hills.

108. Walden's Sibia. Leioptila annectens saturata.

The Eastern Hills .- Kachin and Shan.

109. Rippon's Bar-Wing. Actinodura egertoni ripponi.

Chin and Kachin Hills.—Seemingly a rather curiously distributed bird. According to Harington, occupying the S. Chin Hills (Mt. Victoria) and the Kachin Hills (Bhamo) although Harington says his Kachin Hills skins more nearly resemble the subspecies *khasiana*. Nests taken by Harington at the end of April contained hard-set eggs; so they are evidently early breeders.

110. Ramsay's Bar-Wing. Actinodura ramsayi ramsayi.

Shan States. I obtained this bird on the crags at Taunggyi (Plate I). One of a party of five or six in October, and although I saw them in the breeding season there, I never found the nest. The subspecies *radcliffei*, the Ruby mines Bar Wing is apparently a Northern Shan Hill bird only.

111. The Chin Hills Bar-Wing. Ixops nipalensis poliotis.

South Shan Hills .- Mt. Victoria.

112. The Chestnut-headed Staphidia. Staphidia castaneiceps.

Now recorded by Mackenzie from Chin Hills.

113. Tickell's Staphidia. Staphidia striata striata.

Apparently only in the Shan and Kachin Hills as Bhamo is in the Kachin and not Chin Hills as stated in the Fauna.

114. Hume's Staphidia. Staphidia striata rufigenis.

Harington obtained this subspecies also in the Kachin Hills.

115. Hume's Siva. Siva strigula castaneicauda.

Chin Hills. I once shot one in the Chin Hills, north of Falam, but identified it probably wrongly as the subspecies *strigula*; occurs also in the Kachin Hills

116. Hodgson's Blue-winged Siva. Siva cyanouroptera cyanouroptera.

Chin Hills.

117. The Yunnan Blue-winged Siva. Siva cyanouroptera wingatei.

Shan Hills and Kachin Hills.

118. Oates's Siva. Siva cyanouroptera oatesi.

Very south part of Shan Hills and apparently only discovered on the western border of these Hills.

119. Sharpe's Yuhina. Yuhina gularis yangpiensis.

The subspecies is distributed from the hills south of the Brahmaputra to the Chin Hills, Shan Hills and Yunnan where the next species is also found.

120. Rippon's Yuhina. Yuhina diademata ampelina.

This latter bird is recorded by Harington from the Kachin Hills—breeding April and May.

121. The Black-chinned Yuhina. Yuhina nigrimentum nigrimentum. Chin Hills.

122. The Yellow-headed Ixulus. Ixulus flavicollis.

The subspecies baileyi or flavicollis occur in the North Chin Hills; harterti in the S. Chin Hills, Kachin Hills and Trans-Salween River, Shan Hills—a curious distribution.

123. Oate's Ixulus. Ixulus humilis clarkii.

Another 'sport' like Siva oatesi found on a hill on the extreme western border of the South Shan Hills,

124. The White-bellied Herpornis. Erpornis xantholeuca xantholeuca.

Chio, Kachin and Shan Hills at low elevation—An early breeder apparently,

125. The Indian Red-billed Lithorix. Liothrix lutea callipyga. Chin Hills.

126. The Yunnan Red-billed Liothrix. Liothrix lutea yunnanensis. Kachin Hills.

127. The Nepal Cutia. Cutia nipalensis nipalensis.

Recorded by Mackenzie from the North Chin Hills.

128. The Red-winged Shrike-Babbler. Pteruthius erythropterus. Chin Hills.

129. Tickell's Shrike-Babbler. Pteruthius æralatus.

Kachin Hills. This species was not uncommon on the crags at Taunggyi, Shan States, but I could not find the nest.

130. Hume's Shrike-Babbler. Pteruthius melanotis intermedius.

Inhabits the Eastern Hills of Burma, i.e. Kachin and the Shan Hills.

131. The Common Iora. Ægithina tiphia tiphia.

Apparently this is the subspecies that inhabits all these three parts of Burma. It is very common.

132. The Gold-fronted Chloropsis. Chloropsis aurifrons aurifrons.

Seems to be distributed throughout these areas.

133. The Orange-bellied Chloropsis. Chloropsis hardwickii hardwickii.

Distributed as above. I found it near the most eastern point of Burma in the Shan Hills.

134. The Burmese Chloropsis. Icterocephala chlorocephala.

Also occurs in these three areas.

135. The Silver-eared Mesia. Mesia argentauris argentauris.

Chin, Kachin and Shan Hills.

VI.—Family Pycnonotidæ

136. The Burmese White-throated Bulbul. Criniger tephrogenys burmanica.

Is stated to inhabit the Eastern Hills of Burma, east of the Salween River in the Fauna, from Yamethin to Moulmein. Yamethin is a place in the centre of Burma just north of Pyinmana. Moulmein is at the mouth of the Salween River.

137. The Yunnan White-throated Bulbul. Criniger tephrogenys grandis.

The subspecies is obtainable apparently in the N.-E. corner of the Shan Hills.

- 138. The Assam Black Bulbul. Microscelis psaroides nigrescens. Nigrescens from Assam reaches the North Chin Hills.
- 139. The Burmese Black Bulbul. Microscells psaroides concolor. The Kachin and Shan Hills.

140. The White-headed Black Bulbul. Microscelis leucocephalus.

A bird omitted from the Fauna. Recorded from Taunggyi Shan Hills, (Journ. Bomb. Nat. Hist. Soc., vol. xxix, p. 559). I saw a number of these birds in the company of M.p. concolor in the Northern Shan States in the month of January at about 5,000 ft. and noticed them in the breeding season on the crag at Taunggyi alone and very rare, and I am not sure if they actually bred. If it had not been that I actually observed them in the breeding season, one would have said they were cold weather visitants. Anyway they are more numerous in the cold weather; it is hoped the bird is extending its habitat westwards as it is a handsome species.

141. Thompson's Bulbul. Cerasophila thompsoni.

The occurrence of these birds in the Kachin Hills has also been observed. The finding of its nest in the Shan States has been recorded. (Jown, Bomb. Nat. His. Soc., vol. xxx, p. 223). I have not any doubt now that it breeds in the Shan States and probably Kachin Hills but is not so common as in the cold weather. I was very unsuccessful in finding a nest after the one recorded.

142. The Himalayan Brown-eared Bulbul. Hemixus flavala flavala.

Chin and Kachin Hills.

- 143. Hildebrand's Brown-eared Bulbul. Hemixus flavala hildebrandi. May be obtained in the Shan Hills.
- 144. The Rufous-bellied Bulbul. Hemixus macclellandi macclelandi. In the Chin and Kachin Hills.
- 145. Tickell's Bulbul. Hemixus macclellandi tickelli. In the South Shan Hills.

146. Hartert's Shan Bulbul. Hemixus macclellandi binghami.

Found in the Shan Hills. Harington records *Hemixus m. holti* from the Kachin Hills, but there is apparently some doubt on the subject. The *Fauna* asks for more specimens of the species from different parts of Burma.

147. The Striated Green Bulbul. Alcurus striatus.

Chin and Kachin Hills—Probably also throughout the Shan Hills in suitable elevations. I shot a specimen near Mt. Victoria and remarked it was behaving rather like the genus Spizixus.—Beginning to breed at end of April.

148. The Red-vented Bulbul. Molpastes hæmorrhous.

A species with seven subspecies. There seems to be some difficulty in separating the Burmese subspecies; burmanicus, the Burmese Red-vented Bulbul is found in the Chin and Kachin Hills (Harington) and the eastern edge of the Shan Hills. It is recorded from at least 40 miles east of Mandalay. Further east in the Shan Hills we get, according to the Fauna, the subspecies chrysorrhoides, the Chinese Red-vented Bulbul, which extends north into the Kachin Hills and Yunnan; the 3rd subspecies, nigripileus, the Tenasserim Red-vented Bulbul, being found south of Toungoo, i.e., not in the Shan Hills.

Personally this has upset my own ideas. I always assumed chrysorrhoides (late atricapilla) as the bird which inhabited Tennasserim and nigripileus as the north-eastern subspecies. I notice Cook identifies his Molpastes from the South Shan Hills, west of Taunggyi, as nigripileus and Harington says it occurs in Taunggyi itself and that birds about 50 miles east of Mandalay more nearly approached nigripileus. Harington identifies the Kachin Molpastes as burmanicus. Anyway it is satisfactory that the distribution only affects subspecies now. The detailed description of the subspecies. M. h. nigripileus is omitted in the new edition of the Fauna.

149. Blyth's Bulbul. Xanthixus flavescens flavescens.

150. The Muleyit Bulbul. Xanthixus flavescens vividus.

In the Shan and Kachin Hills. I have noted that a pair on the crags at Taunggyi took only six days to build their nest with two eggs complete. The nest was by no means an unsubstantial one. They appeared to me to always build very low down in thick bushes or even grass. End of April for fresh eggs.

151. The Bengal Red-whiskered Bulbul. Otocompsa emeria emeria.

Apparently the subspecies in the north of Burma, while *peguensis*, the Burmese Red-whiskered Bulbul occurs everywhere else. The latter is a new subspecies. This Bulbul is very easily tamed, coming into the house for food. I know of an instance of it nesting in grass in a vase in a drawing room.

152. The Black-crested Yellow Bulbul. Otocompsa flaviventris flaviventris.

Chin, Kachin and Shan Hills; but a bird of somewhat low elevations and very local—likes to be near water.

153. The Finch-billed Bulbul. Spizixus canifrons canifrons.

Chin and Kachin Hills. Early breeders, generally young by the end of April but I took eggs from a nest on the 28th of that month. The curious nest of tendrils has been often noted, there is no mistaking it. Prefers evergreen jungle at high elevations.

154. The Olive Bulbul. Iole olivacea virescens.

According to the Fauna distributed throughout Burma in the Chin, Kachin and Shan Hills.

155. The Siam Bulbul. Iole olivacea lonbergi.

I shot this bulbul in the Shan Hills at an elevation about 3,000 ft. Breeding 17th March.

156. Anderson's Yellow-vented Bulbul. Pycnonotus auricaster xanthorhous.

Shan and Kachin Hills.

157. Davison's Stripe-throated Bulbul. Pycnonotus finlaysoni davisoni.

Chin Hills.

158. Blandford's Olive Bulbul. Pycnonotus plumosus blandfordi.

Chin Hills—very doubtful; but I have had it breeding in my garden in the Shan Hills and it is said to occur in the Kachin Hills, but nowhere in the hills is it as common as in the plains. The dry zone of Burma is literally full of them; rather a scolding note. The nest is a very shallow and small cup, and the eggs never so richly coloured as other Bulbuls.

159. The Black-headed Bulbul. Microtarsus melanocephalus melanocephalus.

Ubiquitous; but by no means ever common. The only nest I found which was in the Shan Hills near Taunggyi, but at a good deal lower elevation—had one egg a little set. I notice in the Fauna that another species M. poiocephalus has this habit of only laying 1 egg.

VII.—Family CERTHIDIÆ

160. The Yunnan Tree Creeper. Certhia himalayana yunnanensis. Shan Hills.

161. The Chin Hills Tree Creeper. Certhia himalayana intermedia. Chin Hills.

162. The Tibetan Tree Creeper. Certhia familiaris khamensis. Extreme North-east Kachin Hills.

163. The Chin Hills Tree Creeper. Certhia discolor victoriæ.

Apparently this subspecies and Hume's Tree Creeper (C. d. manipurensis) meet where Mackenzie worked in the North Chin Hills. (Journ. Bomb. Nat. Hist. Soc., vol. xxv, p. 82) as he obtained both these subspecies and the nests the latter end of April and beginning of May.

164. The Karenni Tree Creeper. Certhia discolor fuliginosa.

Occurs in the Shan Hills in the east.

VIII.-Family TROGLODYTIDÆ

165. The Yunnan Wren. Troglodytes troglodytes talifuensis. Shan Hills.

166. Long-tailed Wren. Spelæornis longicaudatus.

Kachin Hills (Harington). The two subspecies sinlumensis and kauriensis appear doubtful. S. l. repiatus occurs in the Shan Hills and S. l. oatesi in the Chin Hills.

167. The Scaly-breasted Wren. Pnæpyga squamata squamata.

Chin Hills.

168. The Brown Wren. Pnæpyga pusilla pusilla.

Chin and Kachin and Shan Hills.

169. The Slaty-bellied Wren. Tesia cyaniventer cyaniventer.

Chin and Kachin Hills.

IX. - Family CINCLIDÆ

170. The Formosan Brown Dipper. Cinclus pallasii marija.

Is apparently the only Dipper which inhabits Burma and is the same as the Assam one. I have never shot one, but have watched them from quite near. They behave just like the English species, so far as my observations go. They seem to inhabit the big rocky streams only.

X .- Family TURDIDÆ

171. The Indian Blue Chat. Larvivora brunnea.

Apparently to be found in the North, i. e., Kachin Hills.

172. The Chin Hills Blue Chat. Larvivora wickhami.

Chin Hills. The nest taken by me in April, when I shot the parent bird, was on the side of a hill just above the road cutting at an elevation of about 5,000 ft.

173. The White-browed Short-wing. Heteroxenicus cruralis.

In all three Hills.

174. The Nepal Short-wing. Heteroxenicus nipalensis nipalensis.

Probably in all three Hills, but as yet unrecorded from the Shan Hills.

175. The Chinese Short-wing. Heteroxenicus sinensis.

Kachin Hills probably.

176. The Burmese Stone-Chat. Saxicola caprata burmanica.

Ubiquitous. Probably breeds more in the hills than in the plains and it is perhaps the commonest of the common birds of the country. Whereas some nests are beautifully hidden under a bush, like our English Stone Chat an empty tin or the hollow of a bamboo lying out in the open on the ground may be utilized; again a favourite site is a hole in a bank, the nest just placed in the edge or under a clod. I have seen a nest actually down a hole in the ground and one also in a small grassy hollow in a field, absolutely open and exposed to the weather. I suppose I have taken more cuckoos (*C. canorus*) eggs out of the nests of this species than nests of any other bird. One egg in the clutch is, like the House Sparrow, as a rule different in colouration to the others.

Although fresh eggs may be obtained in May, it begins to breed as a rule at

the end of March.

177. The Turkestan Bush-Chat. Saxicola torquata przewalskii.

This is probably the subspecies of *S. torquata* which inhabits all our areas, although, according to the *Fauna indica* may be found in the north-west corner of Burma. In places where I have spotted it, it never seemed to stay to breed, but Harington is sure that it bred in the Kachin Hills. The *Fauna* records its breeding at a place called Monywa, but Monywa is not in the Chin Hills and there seems to be some mistake.

178. The White-tailed Bush Chat. Saxicola torquata leucura.

May be found in our areas although I have never noticed it in the Shan States. Mackenzie records its breeding in the plains.

179. Jerdon Bush Chat. Oreicola jerdoni.

I have only seen this bird in the plains in the valley of the Irrawaddy River, well north of Mandalay almost in Kachin country and Harington records it in Bhamo plain. Oates, in 1883, when he wrote his Birds of Burma said it had only once been recorded in British Burma, but noted its occurrence at Bhamo, not then in British Burma. Its occurrence in the 'upland grass plains' of the Chin Hills, as stated in the Fauna, I find difficult to believe, as, to start with, such plains are not present in any parts of these hills that I have been in.

180. The Eastern Dark Grey Bush Chat. Oreicola ferrea haringtoni.

A fairly common bird in all these hills. It certainly does not confine itself to open grass lands like the subspecies *ferrea* is stated to do. In habits it appears very different to *O. jerdoni* which enjoys open country. *O. f. haringtoni* likes the jungle although its nesting site is generally an open bank. Early April for fresh eggs.

181. The Eastern Spotted Forktail. Enicurus maculatus guttatus.

Chin Hills, where I shot the bird off the nest, Kachin Hills and Shan States. The nest I took was on a ledge of rock on the roadside cutting. Fresh eggs April 28th.

182. The Slaty-backed Forktail. Enicurus schistaceus.

All these hills, but personally I have only noted it in the Southern Chin Hills where I took its nest in the hollow stump of a tree leaning over a stream early in April. A bird, I should have thought, which preferred the larger streams near the valleys and not the wee streams up in the hills which $E.\ m.\ guttatus$ delights in.

183. The Black-backed Forktail. Enlourus immaculatus.

Chin Hills and I procured it in the Shan States. The nest was under an overhanging bank in a very small water course which was dry but was within 40 or 50 ft. of a perennial stream; May 14 being the date. In the plains I noted it as rather a later breeder than other Forktails.

184. Leschenault's Indian Forktail. Enicurus leschenaulti indicus.

The subspecies *indicus* inhabits the Chin and Kachin States, but the Shan States sub-species is designated *sinensis*, Leschenault's Chinese Forktail.

185. The Little Forktail. Microcichla scouleri scouleri.

The Upper Burma Hills. I should say an uncommon bird.

186. The Blue-fronted Redstart. Phenicurus frontalis.

Chin, Kachin and Shan Hills. Breeds in the former and Northern Shan Hills.

187. The Daurian Redstart. Phoenicurus auroreus.

A winter visitor to the Shan Hills—Arrives about November.—Uncommon and timid. Another winter species of redstart which come to these Burma Hills is *P. hodgsoni*, Hodgson's Redstart.

188. The Eastern Indian Redstart. Phoenicurus ochrurus rufiventris.

I have seen this redstart as late as April in the Shan Hills.

189. The White-capped Redstart. Chaimarrhornis lecuocephala.

A winter visitor to all these hill streams.

190. The Plumbeous Redstart. Rhyacornis fugilinosa.

Also a winter visitor to the Northern Burma Hills.

191. The Chinese Red-spotted Blue-throat. Cyanosylvia robusta suecica.

A winter visitor.

192. The Common Ruby throat. Calliope calliope.

A winter visitor—November to April. Starts to sing before leaving us, a low, pleasant song uttered from a dense bush.

193. The Golden Bush-Robin. Tarsiger chrysæus chrysæus.

Recorded as occurring in the Chin Hills in the Fauna and, as it goes through to Yunnan, probably also to be found in the Kachin and Shan Hills.

194. The Red-flanked Bush-Robin. Ianthia cyanura rufilata.

Chin, Kachin and Shan Hills.

195. The White-browed Bush-Robin. Ianthia indica indica.

According to the Fauna does not seem to be recorded from the Chin Hills but only from the Kachin and Shan Hills. I may be wrong as I did not shoot it, but I considered I identified this bird just below Mt. Victoria, Chin Hills. The nest I found in a bank was destroyed by tree falling on it before eggs were laid. The birds were very tame and behaved like the English robin.

196. The White-tailed Blue Robin. Notodela leucura.

Occurs in these Northern Burma Hills.

197. The Indian Magpie Robin. Copsychus saularis saularis.

To be found everywhere in these hills where man stays.

198. The Indian Shama. Kittacincla macroura indica.

The Burmese name in the Fauna is wrong; it is known to the Burmans as the jungle Magpie-robin and the prefix 'Tau' means jungle. 'Tauthapatelway' (see C. s. saularis) not 'Tai-tha-laik-swe.' The subspecies inhabiting these hills of Upper Burma seems to be indica. A shy bird, but in the breeding season will answer any attempt at copying its song.

In the Andamans, Osmaston got its subspecies albiventris to breed in nest boxes placed in the jungle, a fact which seems to have been overlooked in the Fauna as the nidification of this particular subspecies is said to be 'not re-

corded.'

199. The Dusky Thrush. Turdus eunomus.

A winter visitor to Burma.

200. The Red-throated Thrush. Turdus ruficoilis.

A winter visitor to Burma.

201. The Black-breasted Thrush. Turdus dissimilis.

A resident species in the Chin, Kachin and Shan Hills. Mackenzie took the eggs in the Chin Hills in April and records it as fairly common.

202. The Dark Thrush. Turdus obscurus obscurus.

A winter visitor. Harington records it up to May in the Kachin Hills, but does not think they bred there.

203. Fea's Thrush. Turdus feæ.

A resident of the Burmese Hills.

204. The Siberian Ground-Thrush. Geocichla sibirica sibirica.

This Thrush and G. s. davisoni, Davison's Ground-Thrush are winter visitors.

205. The Orange-headed Ground-Thrush. Geocichla citrina citrina.

Without reading other descriptions I should have said it was a bird of the higher elevation, 4,000 ft. in heavy jungle in Burma. It is common on the crags at Taunggyi, but I did not meet with it often elsewhere in those hills except where such similar jungle existed and such places are uncommon in the Southern Shan Hills. Eggs end of May.

206. The Small-billed Mountain-Thrush. Oreocincla dauma dauma.

Apparently resident in our area.

207. White's Thrush. Oreocincla aurea aurea.

208 The Plain-backed Mountain-Thrush. Oreocincla mollisima.

This and the above named species are only winter visitors.

209. The Large Brown Thrush. Zoothera monticola.

All the hills. I found it in the Chin Hills, but not common.

210. The Chestnut-bellied Rock-Thrush. Monticola erythrogastra.

A common bird of the hills. It has a habit of building its nest in the cuttings of the hill roads. Nests in April.

211. The Blue-headed Rock-Thrush. Monticola cinclornyncha.

Breeds in the Chin and Kachin Hills. Mackenzie records its nesting even further south—Probably a winter visitor to Shan Hills.

212. The Burmese Blue Rock-Thrush. Monticola solitaria affinis.

This is the Burmese subspecies of the Blue Rock-Thrush; a winter visitor to most of our area but said to breed probably in the very north. This is a familiar bird which is noticed by many people on account of its lonely habits and the frequency with which it visits our dwellings, perching on the roofs, etc. Although not really shy, it always has the appearance of being frightened and never looks contented.

213. Swinhoe's Rock-Thrush. Monticola gularis gularis.

I am sure I saw this species on the crag at Taunggyi, Shan Hills in March, but I had no gun with me to procure it. It does not appear to enter the Chin and Kachin Hills.

214. The Rock-Thrush. Monticola saxatilis.

A winter visitor.

215. The Himalayan Whistling-Thrush. Myiophoneus temmincki temmincki.

The subspecies in the Chin and Kachin Hills.

216. The Burmese Whistling-Thrush. Myjophoneus temmincki eugenii.

The Shan Hills. A pair of these birds always frequented the foot of the Taunggyi crags well away from any stream, but I never discovered its nest there. Its liking for streams is of course well-known.

217. The Purple Thrush. Cochoa purpurea purpurea.

This and the Green Thrush, Cochoa viridis are both inhabitants of these hills.

218. Rippon's Hedge-Sparrow. Laiscopus collaris ripponi.

Recorded only from the North Shan Hills, but I expect it could be found in the Kachin Hills too. Apparently the only representative of this sub-family in Burma.

XI.—Family Muscicapidæ

219. The Sooty Flycatcher. Hemichelidon sibirica cacabata.

Is the subspecies in this area. The Fauna says north-east Burma but this little flycatcher certainly inhabits the north-west Hills, i.e., Chin Hills.

220. The Yunnan Sooty Flycatcher. Hemichelidon sibirica rothschildi. Probably in the Shan Hills.

221. The Ferruginous Flycatcher. Hemichelidon cinereiceps.

In all these hills. Macdonald found its nest on Mt. Victoria, the eggs very hard set on 13th May.

222. The Orange-gorgeted Flycatcher. Siphia strophiata.

A winter visitor throughout.

223. The Eastern Red-breasted Flycatcher. Siphia parva albicilla.

Also a winter visitor only.

224. The Rusty-breasted Blue Flycatcher. Cyornis hodgsoni.

In all these hills.

225. The Eastern Slaty-blue flycatcher. Cyornis tricolor cerviniventris.

An inhabitant of the Chin, Kachin and Shan Hills. I found it breeding in the former, and a bird from the Chin Hills shot off a nest is in the Society's Museum. Small moss nests placed in a hole or on a small ledge of roadside cutting generally without lining, but sometimes a few moss roots. The eggs look a dark buffy white—Beginning of May or end of April for eggs.

226. The Little Blue and White Flycatcher. Cyornis superciliaris astigma. Chin and Kachin Hills.

227. The Burmese Little Pied Flycatcher. Cyornis melanoleuca.

228. The Burmese Little Pied Flycatcher. Cyornis melanoleuca westermanni.

Chin Kachin and Shan Hills. Although often met with, it is by no means a common bird and very unobtrusive.

229. The Sapphire-headed Flycatcher. Cyornis sapphira.

Chin and Kachın Hills.

230. The Rufous-bellied Blue Flycatcher. Cyornis vivida oatesi.

Chin and Kachin and Shan Hills.

231. The Pale Blue Flycatcher. Cyornis unicolor unicolor.

Chin Hills.

232. The Blue-throated Flycatcher. Cyornis rubeculoides rubeculoides.

All three hill areas. Mackenzie records it as common in the Chin Hills and took its eggs early in May in the Chin Hills.

233. Salvadori's Blue Flycatcher. Cyornis banyumas dialitæma.

Kachin Hills east of Irrawaddy and Shan Hills. I found this bird common in the latter and it breeds on the crags at Taunggyi. I shot the female off a nest, but this hardly helped me to identify the species and I subsequently got a male. The nests are neat and well hidden against the moss green trunk of a tree, sometimes quite low down. I found the nests in May and June, but I believe they also sometimes breed much earlier than this as I shot a young fully-fledged male early in March. This young bird had a blue tail and a bluish tinge to all its feathers; it was with its parents.

234. Tickell's Blue Flycatcher. Cyornis tickelliæ tickelliæ.

In all three hills. I procured a specimen as far south as Mt. Victoria.

235. The Large-billed Blue Flycatcher. Cyornis magnirostris.

I shot a specimen which I identified as this in the North Shan Hills in the rains. The Fauna does not place it as a Burman species, so I may have been wrong.

236. The Verditer Flycatcher. Stoparola melanops melanops.

Any of these hills, as the *Fauna* says, over 4,000 ft. A common bird and particularly partial to nesting along roadsides.

237. Sharpe's White-gorgetted Flycatcher. Anthipes monileger leucops.

Chin Hills and probably Shan Hills.

238. Brooks' Flycatcher. Anthipes olivaceus poliogenys.

Chin Hills the Fauna says as far east as the Irrawaddy River; perhaps their area comprises also the Kachin Hills therefore.

239. The Sumatran Brown Flycatcher. Alseonax latirostris latirostris.

I understand an entirely winter visitor to our hills and plains.

240. The Grey-headed Flycatcher. Culicicapa ceylonensis ceylonensis.

Apparently the subspecies in the north-west and C. c. orientalis, the Chinese Grey-headed Flycatcher in the north-east. Shan Hills. Breeds from end of March into April: neatnests, against a rock or tree trunk of moss, covered with spiders' egg cocoons.

241. The Large Niltava. Niltava grandis.

Chin Hills and Kachin Hills. Breeds end of April at well over 3,000 ft. elevation.

242. The Indian Rufous-bellied Niltava. Niltava sundara sundara.

Chin Hills and Kachin Hills, probably Shan Hills. It breeds quite commonly in the former hills and I found it as far south at Mt. Victoria. Breeds end of April often in holes of roadside cuttings at an elevation about 3,000 ft.

243. The Small Niltava. Niltava macgrigoriæ.

Chin, Kachin and Shan Hills. Harington took a nest at the end of April in the Kachin Hills.

244. The Burmese Paradise Flycatcher. Tersiphone paradisi affinis.

Chin, Kachin and Shan Hills much more common in the valleys than at higher elevations. Breeds April.

245. The Northern Indian Black-naped Flycatcher. Hypothymis azurea styani.

A fairly common bird in all these hills.

246. The Yellow-bellied Flycatcher. Chelidorhynx hypoxanthum.

Throughout these hills, but I do not know it personally; it seems a bird of high elevations. Harington found it breeding in the Kachin Hills about the middle of April.

247. The Burmese White-browed Fantail Flycatcher. Rhipidura aureola burmanica.

Chin, Kachin and Shan Hills. I have obtained the nest at about 5,000 ft. on the Taunggyi crag, 21st March, but this seems early.

248. The White-throated Fantail Fly-catcher. Rhipidura alibicollis albicollis.

In all three hills; Macknezie took its eggs in the Chin Hills at the end of April.

XII.—Family Lanidæ

249. The Burmese Shrike. Lanius colluroides.

Chin, Kachin and Shan Hills; in the latter it is a very common breeder and undoubtedly moves up from the plains to breed.

250. The Indian Black-headed Shrike. Lanius nigriceps nigriceps.

Distributed as above but not such a common bird.

251. The Grey-backed Shrike. Lanius tephronotus.

Apparently only a winter visitor to Burma.

252. The Philippine Shrike. Lanius cristatus lucionensis.

A winter visitor, but I have seen it in the Shan Hills up to April. The song of this bird always reminded me of a sedge warbler at home and is also like the Thick-billed Warbler, *Phragmaticola ædon*.

253. The Brown-backed Pied Shrike. Hemipus picatus capitalis.

All Burmese Hills.

254. The Nepal Wood Shrike. Tephrodornis pelvica pelvica.

All the Burmese Hills. I shot it at 5,000 ft. on the Taunggyi crag. In company with others, the bird was hunting in the top branches of the higher trees. I cannot find any note of the nest being found in Burma, but it must breed in that country.

255. The Indian Common Wood-Shrike. Tephrodornis pondiceriana pondiceriana.

Chin, Kachin and Shan Hills. The nest taken at the beginning of April in the Shan Hills 3,000 ft. was in scrub jungle about 8 ft. above ground in a small tree standing by itself; very shallow cup; outside moss and lichen. Lined hair. In the plains the bird, I think, breeds later and often higher up.

XII .-- Family PERICROCOTIDÆ

256. The Burmese Scarlet Minivet. Pericrocotus speciosus fraterculus.

Chin, Kachin and Shau Hills.

I once found the nest of this bird in the Chin Hills and twelve years after, almost to the day, there was a nest in, as far as I could remember, the same tree.

257. The Assam Short-billed Minivet. Pericrocotus brevirostris affinis.

Kachin and Shan Hills probably. I should say the Chin Hills. I found a nest on the top of the Taunggyi Hills, Shan Hills, and shot both parent birds on 22nd March 3 eggs fresh, the nest and eggs similar to other minivets.

258. Hume's Minivet. Pericrocotus neglectus.

Recorded by Col. Rippon, according to Harington, from the Kachin Hills which is some way from Tennasserim, the habitat of this bird according to the Fauna. There may be a mistake?

259. The Yellow-throated Minivet. Pericrocotus solaris solaris.

The Chin and Kachin Hills.

260. The Shan Minivet. Pericrocotus solaris ripponi.

Shan Hills.

261. The Rosy Minivet. Pericrocotus roseus roseus.

Chin, Kachin and Shan Hills. I remember Osmaston taking a nest in the latter hills.

262. The Burmese Small Minivet. Pericrocotus peregrinus vividus.

Common everywhere and breeding well up to 3,500 ft. I once found the nest of this minivet only two feet above the ground, but generally they are well out of reach. Eggs beginning of May.

263. Jerdon's Minivet. Pericrocotus albifrons.

In the Fauna said to occur in the Chin Hills, but I doubt this and believe it is only a bird of the dry zone of Burma.

264. The Pale-grey Cuckoo-Shrike. Lalage melaschista avensis.

Chin, Kachin and Shan Hills. I have taken the nest at Taunggyi, Shan States about 4 to 5,000 ft. It was placed fairly high up in a fork of a branch almost like a drongo's. 3 fresh eggs end of April.

265. The Black-headed Cuckoo-Shrike. Lalage sykesii.

Mackenzie records this bird from the North Chin Hills.

266. The Siamese Large Cuckoo-Shrike. Graucalus macei siamensis.

Chin, Kachin and Shan Hills. The raucous cry of this bird can be often heard. It has a wonderfully neat and small nest for its size, generally high up and in a tree fork, rendering it difficult to see.

Mackenzie took eggs at the end of April in the Chin Hills and I took eggs at Maymyo at end of May, but I think this was unusually late. Generally 2 eggs.

XIV. - Family ARTAMIDÆ

267. The Ashy Swallow-Shrike. Artamus fuscus.

Chīn, Kachin and Shan Hills. A bird of the plains and hills alike. The description of their habits in the *Fauna* seems very good and brings out their characteristics well.

XV .- Family DICRURIDÆ

268. The Crow-billed Drongo. Dicrurus annectens.

Distributed throughout these hills but the Field naturalists who have collected birds in Burma do not seem to have recorded it. Presumably they are so like the next species! they have not been shot and identified and seem to have been missed. I certainly have never noticed it, nor handled a specimen.

269. The Black Drongo. Dicrurus macrocercus.

Apparently of this species the subspecies *D. m. albirictus*, the Himalayan Black Drongo is found in the north and *D. m. cathæcus*, the Chinese Black Drongo in the southern portion of these hills. End of April and beginning of May seems the breeding time.

270. The Grey Drongo. Dicrurus leucophæus.

According to Mr. Stuart Baker, the subspecies which inhabits the north of our area is hopwoodi, the Assam Grey Drongo and in the south nigrescens, the Burnese Grey Drongo, this applying to the Kachin Hills (please see map.) The distribution is difficult to understand, and the same remarks apply to the subspecies of macrocercus. I have taken the eggs of this species all over the Shan Hills and on the last occasion shot the bird to the east of Mandalay and should have said it was hopwoodi, but to really identify these subspecies one wants a series of skins for comparison. They begin to nest at the end of March in the Shan States: the nest is not as a rule difficult to find as the birds return to it fearlessly. The eggs seem to me to be always squat ovals and not like the Black Drongo's in shape and as a rule very much more handsome in colouration.

271. The Northern Bronzed Drongo. Chaptia ænea ænea.

Chin, Kachin and Shan Hills. I found this bird breeding late in March at Taunggyi, Shan Hills and noted young birds on 19th of that month further east but Mackenzie took them a month later in the Chin Hills.

272. The Indian Hair-crested Drongo. Chibia hottentotta hottentotta.

A common bird in all our hills, breeding end of April. The nests I note are very untidy cradles and one cannot understand what governs the choice of site for more variable sites for nests it is difficult to find. Sometimes hidden away in jungle, sometimes overhanging a highway, sometimes very high and out of leach and sometimes quite low enough to reach by hand by pulling the branch down a little.

273. The Indian Lesser Racket-tailed Drongo. Bhringa remifer tectirostris.

Chin and Kachin and Shan Hills. Mackenzie says breeds sometimes quite low down and I have noticed this myself. Breeds end of April.